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ABSTRACT

This guide is designed specifically to assist decision makers in business and industry, including chief executive officers, benefits managers, human resource directors, wellness coordinators, and owners of small businesses, in understanding how diet and nutrition affect employees and the company. It addresses the concerns of both small and large employers. Part 1 offers examples of health and economic benefits of worksite nutrition programs and strategies for working with employees to improve dietary habits. Part 2 presents nutrition program options available to companies and important aspects of program development and implementation. Part 3 provides an array of examples of companies that have created an atmosphere conducive to healthful nutrition practices. Finally, lists of resources and suggested readings provide assistance in locating materials, programs, and providers. (YLB)

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Worksite Nutrition:
A Decision-Maker's Guide

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The American Dietetic Association
Society for Nutrition Education
Office of Disease Prevention and Health Promotion
Public Health Service
U.S. Department of Health and Human Services
1986

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Table of Contents

Acknowledgments ii
Table of Contents iii
Introduction 1

Part 1: Strategic Planning 3
Nutrition, Health, and Economics 3
How Worksite Nutrition Can Benefit Your Company 5
Why Worksite Nutrition Programs Are Likely to Succeed 7
Types of Worksite Nutrition Activities 8
- Multi-Component Programs 8
- Weight Control 9
- Cardiovascular Risk Reduction 11
  - Cholesterol Education 11
  - Hypertension Control 12
- General Nutrition Classes 12
- Cafeteria Programs 13
- Nutrition for Pregnant and Lactating Women 16
- Diabetes Screening and Education 16

Planning for Successful Nutrition Activities at the Worksite 17
- Results That Can Be Expected 17
- Keys to Success 18

Part 2: Implementation Tools 19
Program Elements 19
Selecting Qualified Providers and Programs 23
Offering Employee Incentives 25
Program Promotion and Communications 27
Involving Employees 29
A Step-By-Step Framework for Developing Worksite Nutrition Activities 31

Part 3: Examples and Resources 37
Examples of Successful Worksite Nutrition Programs 37
Resources 51
Suggested Reading 55
References 56
Order Form 59

Introduction

A sound business strategy embraces efforts to preserve and improve employee health. With clear evidence of a relationship between certain dietary behaviors and 6 of the 10 leading causes of death, it follows that nutrition is an area of health in which employers have a special opportunity and incentive to invest in health-enhancing programs. It is also true that efforts undertaken by businesses to improve their employees' nutrition habits can contribute significantly to promoting individual health and well-being.

Why is nutrition an important issue for your business? Many Americans, including your employees, may not be eating the types of foods that can aid in the prevention of heart disease, arteriosclerosis, stroke, some cancers, diabetes, obesity, and low birth weight. Are you aware that an estimated 35% of all cancer deaths are related to nutrition (Doll and Peto, 1981)? Illnesses and deaths from nutrition-related causes make a sizable contribution to overall expenditures for health care. In 1984, business and industry spent $97 billion for health care, and this amount is expected to continue to rise (Employee Benefits Research Institute, 1985). The American Heart Association estimates that the cost to society for treating patients with cardiovascular diseases will surpass $78.6 billion for 1986. Beyond direct medical expenditures, companies also experience the impact of nutrition-related diseases in increased absenteeism and reduced productivity. Your employees' eating practices can have an effect on your business' bottom line.

Although worksite nutrition programs are a recent phenomenon, more companies are developing or expanding nutrition activities. Results from a 1985 national survey sponsored by the Department of Health and Human Services indicate that roughly 16% of the companies surveyed offer some type of nutrition activity to their employees. Of those companies interviewed, the following reasons for offering nutrition programs at work were cited most often:

- improved employee health
- improved employee morale
- increased productivity

As these findings show, more and more companies realize that nutrition programs can and do benefit both the company and the worker in many ways.

This guide is designed specifically for decision makers in business and industry, including CEOs, benefits managers, human resource directors, wellness coordinators, and owners of small businesses, to assist you in understanding how diet and nutrition affect your employees and your company. It addresses the concerns of both small and large employers. The first section of the guide offers examples of health and economic benefits of worksite nutrition programs and strategies

for working with your employees to improve dietary habits. The second section presents nutrition program options available to companies and important aspects of program development and implementation. The third section of the guide presents an array of examples of companies that have created an atmosphere conducive to healthful nutrition practices. Finally, lists of resources and suggested readings provide you assistance in locating materials, programs, and providers.

It is our belief that your company will see the benefits of offering nutrition programs to your employees. We invite you to join in this growing effort to help the American work force stay well and productive through better eating practices.

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Part 1. Strategic Planning

Nutrition, Health, and Economics

A relationship between certain dietary habits and at least 5 of the 10 leading causes of death has been clearly established. Nutrition plays a key role in the following:

- heart disease
- some cancers
- stroke
- arteriosclerosis
- diabetes

Good nutrition practices are important both for the prevention of these and other diseases, and for the reduction of risk factors that cause or complicate chronic illnesses (e.g., obesity and high blood pressure).

Heart disease is the number one killer of Americans. High-fat diets contribute to the development of heart disease, and low-fat diets can help reduce this risk. Diets high in sodium can increase the chances of high blood pressure for some individuals. Obesity plays a role in the development of both hypertension and high blood cholesterol, which are major risk factors for heart disease. Obesity also increases the risk of diabetes and gall bladder disease.

Approximately 35% of all cancers are estimated to be linked to nutrition. For example, diets high in animal protein and low in fiber from plant sources may be linked to colon cancer. High overall consumption of fat has been linked to breast cancer, colon cancer, and cancers of the ovary and prostate (Doll and Peto, 1981).

Poor nutrition in pregnant women is a contributing factor in low birthweight babies, a leading cause of death among infants. Over half of all women in the U.S. are currently in the labor force, and an estimated 85% of those employed will become pregnant at one time during their working lives (Kamerman et al., 1983).

For some people, alcohol is a major dietary component, and alcohol is a direct cause of cirrhosis, the sixth leading cause of adult deaths.

The economic consequences of unhealthful eating can be severe:

- Corporations paid $97 billion for health care in 1984 (Employee Benefits Research Institute, 1985).
- The American Heart Association (AHA) estimates the cost of treating cardiovascular diseases will be $78.6 billion in 1986.
- Caring for patients with cancer of the digestive tract cost $1 billion in 1984, according to the National Cancer Institute.

Additional examples of the potential economic impact of poor nutrition and unhealthful eating behavior are as follows:

- The American Heart Association estimates that as patients with heart disease take time off from work for treatment and recovery in 1986, $13.8 billion will be lost due to reduced productivity.
- Obesity increases the chances that employees will suffer from back pain, and backaches account for 93 million lost workdays in this country annually (Oliver and Kirkpatrick, 1982).
- One study indicates that people who are 40% overweight visit their doctors and miss work twice as often as the average individual; this costs employers an extra $1,000 per year for each such overweight worker (Read, 1985).
- Diabetic workers average twice as many lost workdays per year and have 2.3 times as many hospitalizations as nondiabetics of the same age (*Diabetes Care*, 1985).

Improvements in eating habits can reduce the risk of health problems. Guidelines have been developed to assist Americans in adopting healthful eating patterns, both to prevent health problems and to reduce health risks that already exist. These guidelines are summarized in *Nutrition and Your Health: Dietary Guidelines for Americans*, developed by the U.S. Department of Agriculture and the Department of Health and Human Services:

1. Eat a variety of foods
2. Maintain desirable weight
3. Avoid too much fat, saturated fat, and cholesterol
4. Eat foods with adequate starch and fiber
5. Avoid too much sugar
6. Avoid too much sodium
7. If you drink alcohol, do so in moderation

To adopt more healthful dietary practices, people need information, motivation, behavioral skills, access to healthful food choices, and the support of those around them. Worksite nutrition programs can provide these components to enhance the health of working people and their families.

How Worksite Nutrition Can Benefit Your Company

Eating right ranks as one of the most important steps toward good health. According to the National Center for Health Statistics, there was a 39% decline in death from cardiovascular disease in the United States from 1963 to 1983 (USDHHS, 1985), and as much as 30% of this decline can be attributed to improvements in diet (Goldman and Cook, 1984).

Nutrition programs in business and industry can help workers and their families reduce the risk of heart disease and cancer, lose weight and maintain weight loss, reduce high blood pressure and cholesterol, control diabetes, and improve pregnant women's health. They also can improve workers' attitudes toward themselves and their work, enhance productivity, and reduce health care costs and absenteeism.

- An estimated 16.7 million workers are more than 20% above their desired weight (NHLBI, 1983). Weight loss may significantly improve physical health, productivity, and morale. Employees suffering from back pain attributable to excess weight can not only feel and look better after losing weight, but have reduced the likelihood that they will be absent and their risk of injury and disability.

- Weight-loss competition programs in businesses have been found to successfully help workers reduce their excess weight, and at a lower cost than medical or commercial programs in the community (Brownell et al., 1984).

- Reduction of fat and cholesterol intake may achieve reduction in blood cholesterol within 1 or 2 months of starting a focused nutrition program. Programs at L. L. Bean and New York Telephone that promote low-fat eating patterns among workers with high blood cholesterol levels have succeeded in lowering those levels between 8% and 17%.

- A major research study on high-risk men found that each one percent reduction in high blood cholesterol yields an estimated 2% reduction in the risk of a heart attack (Lipid Research Clinics/Coronary Primary Prevention Trial, 1984). Health care expenditures, disability payments, and the costs of retraining that result from a heart attack may be reduced through an effective cholesterol education program.

- Low-sodium diets coupled with weight loss may reduce the need for long-term medication in the treatment of hypertension (Langford et al., 1985; Reisin et al., 1978). Worksite hypertension management programs have achieved control rates of 68% to 98%, as compared to overall rates of 31% in the general U.S. population (NHLBI, 1984).

- Encouraging good diet control among diabetic workers through a workplace program may reduce absenteeism and health care costs. Diabetic workers

average 2.3 times as many hospitalizations as nondiabetics of the same age (*Diabetes Care*, 1985).

- The problems associated with mothers returning to work while breastfeeding can be eased for new mothers through a worksite support program. Hunterdon Medical Center in New Jersey provides breast pumps, time for expression of milk, and a refrigerator. This has helped reduce absenteeism.
- Worksite cafeteria business may increase when a nutrition program is instituted. At Memorial Sloan-Kettering Cancer Center in New York, business increased after the foodservice featured special healthful menus and food preparation demonstrations during National Nutrition Month. Cafeteria sales increased an additional $500 to $700 per day over the usual $4,200 in nonpatient meals each day, or a 12% to 17% increase in food sales.

A workplace nutrition program can also contribute to the following:

1. **A positive company image** in the corporate arena, in the community, for visitors, and for prospective employees.

2. **A valued benefit for employees.** Nutrition programs, and an overall wellness program, show personal interest in company employees. Company attitude surveys provide evidence that health promotion is viewed by workers as one of the most valued, tangible benefits.

3. **Reduced health services use.** Avoiding major health problems such as heart attacks, back injuries, and diabetic emergencies can reduce both the number of hospitalizations and the use of outpatient medical care. Although no studies have been done which focus on the benefits gained specifically from worksite nutrition programs, the results of studies of two comprehensive corporate health promotion programs are encouraging:
   - After 3 years, Johnson & Johnson's Live for Life program, which includes a nutrition component, resulted in fewer hospitalizations for employees at sites with a wellness program than for employees at sites without the program (Hermann, 1986).
   - In a 5-year follow-up of an employee health enhancement program at Blue Cross and Blue Shield of Indiana, workers who participated in the wellness program, which included nutrition education, averaged 24% lower health care costs than nonparticipants. This amounted to $1.45 in long-term health care savings for every $1 spent on the program (Gibbs et al., 1985).

Why Worksite Nutrition Programs Are Likely to Succeed

Introducing nutrition programs at work makes good sense:

- Most people eat at least one of their daily meals at the workplace. Daily events at work often influence how and what people choose to eat. A worksite nutrition program reminds people about healthful food choices and supports health-enhancing decisions.

- The workplace provides many environmental supports for positive changes in eating behavior. Making healthful food choices available, providing information at the point of choice, and engaging the support of fellow employees can make it easier for people who want to make or sustain improvements in their diets.

- Nutrition programs at the worksite can provide incentives and positive reinforcements to increase motivation. For example, if an employer wants to encourage weight loss among overweight workers, paying for part of the cost of a weight management program or allowing time off to participate in the program may reinforce the employee's resolve to lose weight.

- People share information about food at work. At a time when people are inundated with information from a variety of sources, a solid nutrition education effort can inform employees about sound nutrition.

- The workplace is a convenient location for nutrition education programs.

- Programs offered at the worksite can be less expensive than comparable programs in the community. Several studies have found that for weight loss programs, the cost per pound lost in worksite programs was less than in medical or commercial programs in the community (Brownell et al., 1984; Peterson et al., 1985; Seidman et al., 1984).

Types of Worksite Nutrition Activities

Nutrition programs often exist as one part of a broad-spectrum worksite health promotion effort. As the number of worksite health promotion programs increases, it is likely that nutrition programs also will continue to expand. The availability of materials and strategies with demonstrated success will add to this growth by reducing the cost of program development.

Surveys have shown that larger companies tend to have more worksite health promotion programs than small companies. However, there is a program that is right for every company and budget. Small and medium sized companies may select less expensive approaches such as print materials – newsletters, handouts, and posters – with environmental changes such as fresh fruit in vending machines and healthful snack breaks. Smaller companies may need to do creative planning in order to be able to offer more expensive educational methods such as seminars, courses, or counseling.

Occasionally, costs or small employee populations may appear as a barrier to offering wellness activities; however, emerging Wellness Councils may offer the required assistance. Wellness Councils consist of businesses in a local area who have joined to share health expertise and resources in an effort to expand the reach of health promotion programs to employees. Wellness Councils are being formed in cities across the country with the assistance of the Health Insurance Association of America. The wellness council movement is growing quickly: more than 20 cities will have councils by the end of 1986, and more are on the way.

Small businesses will find that many local voluntary health agencies, hospitals, chambers of commerce, Cooperative Extension offices, public health departments, and colleges and universities may be able to assist companies in their wellness efforts. Other alternatives are to ask employees to share program costs or to provide partial reimbursement for joining programs that are available in the community.

The following descriptions of types of worksite nutrition programs include examples from some small companies and many large businesses.

Multi-Component Programs

Many large companies, and even some mid-sized and small companies, have multi-component nutrition programs, often as part of a larger, comprehensive wellness effort. Multi-component worksite nutrition programs with screening, intervention, and follow-up are considered models for workplace health promotion efforts designed to change behavior and improve health status.

- Campbell Soup Company began its Atherosclerosis Prevention Program in 1968. About 35% of the employees who completed a medical screening at that time had elevated blood lipid levels. They were advised to follow a prudent diet, and about 50% were still following the diet a year later. Campbell's

dietary counseling for reduction of weight, lipids, and hypertension includes weekly consultations, handouts, and follow-up. Weight-loss programs are an important part of the Campbell Turnaround Health and Fitness Program, and exercise facilities and incentives boost its success rate.

- Johnson & Johnson (J & J) conducts an ongoing program called Live for Life. Among the core "action programs" J & J offers are a 10-session weight control program and an 8-session nutrition program which emphasizes prudent eating patterns. As part of the emphasis on creating a healthful environment, there are scales in the restrooms, special foods in cafeterias and vending machines, and nutrition information where food is sold. Comprehensive program evaluation includes a participation tracking system and analysis of the cost-benefit of the complete health promotion program.

- Rodale Press emphasizes environmental strategies and "strong company support for healthful living." Fresh, low-fat, low-salt, whole-grain foods are served in four company cafeterias; there are extensive health information resources internally; and Rodale's Food Research Center develops tasty healthful foods for its employees.

Weight Control

Weight control programs are the most popular type of worksite nutrition program. These programs have been conducted in many different settings in business offices, banks, industrial firms, universities, hospitals, police departments, military bases, and department stores. They have been staffed by dietitians, nurses, clinical psychologists, health educators, physician-led teams, and specially trained volunteers. There are numerous locally and nationally available weight-loss programs that can be conducted at the workplace. Dietitians and nutritionists in private practice can develop programs tailored to a company's specific needs.

Behavior modification, motivation, physical activity, and information about diet are recognized as key ingredients in a successful weight control program. It is possible to structure the program in one of several ways to fit the company situation and the special characteristics of the employees. Four distinct approaches are described below: small group sessions, large group lectures, self-management or minimal contact programs, and weight-loss competitions. These approaches can be combined or offered at different times.

1. **Small group sessions** usually focus on information, behavior modification, and social support from group members. Usually a group consists of 8 to 20 participants who meet once or twice a week at lunchtime or after work for 8 to 16 weeks.

   - An advantage of this format is that it provides a well-defined structure that allows employees to work both individually and with their peers toward personal weight goals.

- Disadvantages: the success of the group depends on a skilled leader and regular attendance, and group programs can be relatively expensive. Some employers find that asking employees to share the cost enables them to offer a program.

  - If necessary, a company can turn to audiovisual materials for some back-up. Atlantic Richfield Company has been using a videotaped weight-control program with manuals developed by university nutritionists. The program is delivered by specially trained occupational nurses.

2. **Large group lectures** increase knowledge about weight control strategies for all employees.

   - A large group lecture series of 5 to 10 sessions can be presented at the lunch hour with bag or box lunches available to those who attend, and can accommodate large numbers of people. An 8-week seminar at Chemical Abstracts in Columbus, Ohio attracted between 60 and 200 employees each week.

   A large group lecture or seminar series usually includes topics such as food intake and weight, fad diets, exercise, and introductory behavior modification.

   - An advantage of this type of program is that it conveniently reaches many people in a short period of time.

   - This approach alone should not be expected to result in significant weight losses.

3. **Self-management or minimal contact programs** stress weight loss through dietary and behavioral self-management with regular feedback from professional staff.

   - They meet the special needs of a sales force or other workers with irregular schedules, and/or managers who may be unable or unwilling to come to group sessions at the workplace.

   - These programs also minimize the amount of professional effort. They can be conducted with the help of the company medical department or an outside consultant.

   - Minimal contact or self-management programs, or "correspondence courses," depend heavily on well-developed written materials for self-study and assignments that can be mailed in for staff to review. Periodic phone calls and weigh-ins at the company or at home help to reinforce and monitor changes. Usually programs of this type last at least 12 weeks.

- A pilot "correspondence course" conducted at Johnson & Johnson resulted in successes comparable to a small group program.

4. **Weight loss competitions.** Competitions are a relatively innovative and often highly successful way to motivate employees to lose weight. Many worksites naturally have competitive atmospheres, expressed in terms of sales volume, profit, or after-work team sports contests. Competitions can be held between individuals, teams, departments, or companies. The basic elements of competitions are (1) weigh-in and weigh-out, (2) team or individual competition for prizes, and (3) behavior modification and written education modules based on sound diet information.

   A typical competition, similar to one held between three banks in Williamsport, Pennsylvania, might involve each participant setting a safe weight loss goal, and then paying $5 into a pool. The participant would then receive weekly behavior modification modules, and be weighed each week. At the end of the contest, the team closest to reaching its goals would win the pool.

   - Competitions don't require large time commitments for classes, and have achieved very low drop-out rates. They also seem to be very popular and effective in helping men to lose weight.

   - As with other self-management methods, they require carefully developed written materials, but are inexpensive after the initial setup.

   - Because they stress self-responsibility and rely heavily on group support and motivation, competitions can be very cost-effective. In a competition at the Lockheed Missile and Space Company in California, 2,499 employees entered a competition where the average cost per pound lost was only 94 cents (Seidman et al., 1984).

Cardiovascular Risk Reduction

Nutrition programs to reduce the risk of cardiovascular diseases focus on weight control, blood cholesterol reduction, and blood pressure management.

Cholesterol Reduction Programs

Recent scientific evidence about the health benefits of reducing elevated blood cholesterol has strengthened cholesterol education efforts nationwide. The most important behaviors that are encouraged in cholesterol reduction programs include eating a diet low in total fat, cholesterol, and saturated fat; losing weight if necessary; and increasing physical exercise. Medications may be used for those with extremely elevated blood cholesterol levels, but diet and exercise are the cornerstones of cholesterol reduction for most people.

Worksite screening, nutrition information, behavior modification, group support, periodic contact, self-monitoring, and feedback are components of

cholesterol education. As screening techniques become more reliable, more portable, and less expensive, their use at worksites will spread.

- In a worksite screening and education program for Social Security Administration employees, a 24-week lipid clinic staffed by a nutritionist and physician was compared with physician referral and a no-treatment control group. Both the clinic group and physician referral group achieved 12% to 17% blood cholesterol reductions, significantly greater than the 4% drop in the control group that received screening only.

- At New York Telephone Company, an 8-week small group program with 6 monthly maintenance meetings used behavior modification techniques, nutrition information, physical activity planning, and self-management skills. When compared with a control group, the experimental subjects showed significant improvements in knowledge, weight loss, and blood cholesterol reduction (8.8% vs. 2.4%).

- A successful cholesterol education program recently took place at L. L. Bean Inc., in Freeport, Maine. Employees known to be at high risk for heart disease were invited to a free cholesterol screening; other employees were welcome if they covered the cost. After a general education session, those with high cholesterol were invited to join the L. L. Bean Heart Club. At the end of the program there was a 14% average cholesterol reduction in participating employees, for an average 28% drop in the risk of heart disease.

Hypertension Control

For control of high blood pressure, most worksite programs report using combinations of screening, referral, education, and follow-up. Dietary change has been shown to be a viable alternative to long-term drug treatment, without the expense and possible side effects. Weight reduction for overweight hypertensives and sodium intake reduction are the most important diet changes.

To help employees control hypertension, heart disease prevention programs and general nutrition classes can include written information, lectures, and cooking and taste-testing demonstrations that address the sodium content of foods. Cafeteria programs can easily include labelling of high-sodium foods or identification of especially low-sodium foods for both treatment and prevention purposes. Techniques such as behavior modification and self-monitoring of food intake can be adapted for the workplace. The success of these approaches relates directly to the intensity of follow-up.

General Nutrition Classes

As more people become interested in nutrition, both as a measure for preventing chronic diseases and as a way of maintaining or improving health, they seek out reliable sources of nutrition information and practical advice on how to incorporate healthful foods into their everyday lives. Many companies offer general nutrition classes or brown-bag seminars to meet this demand.

The *Dietary Guidelines for Americans* can be easily related to everyday eating patterns. A general nutrition class can also address special topics such as cancer risk reduction or child nutrition.

- At firehouses in Texas, *taste-testing demonstrations* were held in which firemen were given similar foods, with one version modified to be lower in fat, cholesterol, sugar, sodium, and calories. The firemen were asked to rate the foods without knowing which was the modified version. Since the modified foods scored as high as the original recipes, the demonstrations helped convince them that healthier foods can taste good, too!

- One health maintenance organization (HMO) in Oregon created a nutrition hotline, staffed by professionals, for their employees.

- A bank in a rural area of Pennsylvania used learn-at-home nutrition lessons developed by the County Cooperative Extension Service.

- Employees at the Lotus Corporation were encouraged to sign up for a nutrition course following a healthful buffet lunch sponsored by the company.

Cafeteria Programs

There are many environmental and informational strategies that can be used wherever employees consume food during the workday—in the cafeteria, near vending machines, in meetings, and at special events. These programs increase opportunities for employees to learn to make better food choices and reduce barriers to behavioral change. They take minimal employee time and effort. These techniques take advantage of the workplace eating situation, and are a part of almost every comprehensive health promotion program with a nutrition component.

Cafeteria programs can reach many employees with relatively small expense per person, and can stand alone or work with other nutrition programs. Even if small businesses lack a cafeteria, a refrigerator, a communal lunchroom, or vending machines can support employees' efforts to improve their diets.

- A small division (150 employees) of the J.R. Simplot Company in Lathrop, California, installed a comprehensive cafeteria program including training for cafeteria staff about heart-healthful food, recipe and menu development, changes in cafeteria layout, and written handouts.

While there are many variations on cafeteria programs that can be used, most techniques fall into one of four categories, which may be used alone or in combination: food availability; point-of-choice information; incentives, contests, and other environmental changes; and educational programs.

Food Availability

As healthful foods have grown more and more popular, almost everyone is pleased to have them available. They provide a special boost to those trying to control their weight, lower cholesterol, or follow a therapeutic diet for other health needs.

- At seminars and meetings, employers can offer fruit juice, fresh fruit, bran muffins, and crackers and cheese. Vending machines can offer fresh fruit and raisins, popcorn, unsalted nuts, and skim milk.

- Community Hospital of San Gabriel in southern California has started offering "healthful" selections on its menus as part of its employee health promotion program. The items follow the "Dine to Your Heart's Content" guidelines of the American Heart Association Greater Los Angeles affiliate, which are aimed at reducing incidence of heart disease. Selections are low in fat, cholesterol, and calories; they are baked or broiled and prepared without extra oil, gravies, or heavy sauces.

- The Boeing Company in Seattle offers daily nutrition specials approved by the AHA's Washington affiliate and University of Washington at prices of 25% less than the regular daily fare. They also feature salt-free seasonings at the salad bars, and taco bars with low-sodium cheese.

- Millard Manufacturing Company in Omaha provides an incentive program for its 40 employees, in which the owners provide a morning snack of muffins and juice for employees who have no unexcused absences for a week. The owners find that this program has made a huge difference in attendance.

- Rodale Press in Emmaus, Pennsylvania has based its entire foodservice operation around wellness. All menu items are low in cholesterol, salt, and fat. About 65% of Rodale's 850 employees take advantage of this foodservice, with many taking Rodale's "dinners to go."

- At New York Telephone, Service Systems Corporation makes available "Meals for Weight Watchers." These are fresh 400-calorie lunches including entree, vegetable, salad, and dessert which sell for $2 or $3. Employees also receive a nutrition handbook which includes calorie counts for specific menu items.

- At the Grumman Corporation's headquarters on Long Island, optional 4-course meals with less than 600 calories are offered in the executive dining room.

Point-of-Choice Nutrition Information

Providing nutrition information at the point of purchase—vending machines, college dining rooms, and employee cafeterias—can be an effective communication mechanism. Labelling can be as simple as designating heart-healthful items, often identified with a special logo related to the company health promotion

program. Calories, fat, sodium, and sugar and other nutrients can be listed on menus, or alongside food items using stand-up cards in the cafeteria line. If a small company's employees usually eat out, local restaurants and coffee shops will often cooperate by indicating nutritious items on their menus. In the Pawtucket Heart Health Program in Rhode Island, a grocery and restaurant labelling program using the "Eat Hearty" logo is a guide for employees eating in the neighborhood.

- In the National Heart, Lung, and Blood Institute's employee cafeteria, a "Food for Thought" nutrition card game yielded increases in skim milk purchases, decreases in dessert and bread choices, and a significant decrease in average calories purchased per person per day.

- At the Mattel Toy Company cafeteria, a pretest, posttest evaluation assessed the impact of cards comparing the calorie, sodium, and fat content of similar foods. There were significant reductions in the amount of calories and sodium per tray, and a trend toward reducing the amount of fat per tray.

- Boeing's Rainbow Nutrition Program identified recommended cafeteria food choices (i.e., foods adhering to the U.S. Dietary Guidelines) with rainbow tags and calorie information. Cash register tapes were used to determine that over 4,000 employees chose Rainbow foods each day.

Incentives, Contests, and Other Environmental Changes

The cafeteria or worksite eating situation can be used as a focal point for special incentives and health-oriented events and innovations. Some examples include:

- **Incentives.** For buying a "wellness meal" in the company cafeteria, Motorola, Inc., in Ft. Lauderdale gives free jump ropes to employees with instruction books and information on how to measure cardiovascular efficiency.

- **Contests.** Contests to identify the nutrient content of various foods or to develop recipes for new health-promoting menu selections can create interest and motivate participation in nutrition activities.

- **Other environmental changes.** Placement of scales and/or full-length mirrors in restrooms can remind people of their weight-loss goals, reinforce their progress so far, and help keep them on track.

Educational Programs

Offering nutrition education programs in or near the cafeteria can help make the educational activity immediately applicable.

- At Memorial Sloan-Kettering Cancer Center in New York, the cafeteria was the site of week-long nutrition promotions during National Nutrition Month, which is sponsored by The American Dietetic Association. Staff demonstrated low-fat and vegetarian wok cooking, and the cafeteria featured special nutritious dishes.

Issues Concerning Cafeteria Programs

Cafeteria programs involve both promotion and coordination of all people involved in decisions about foodservice, vending machine suppliers, the company medical department, and the health promotion program.

It is probably easiest to work out a cafeteria program when a company-owned foodservice is being used. An outside foodservice may be concerned about its contract, cost containment, and the extra manpower that may be needed to prepare new dishes or maintain a salad bar or labelling program. Another factor that may influence the ease or difficulty of introducing changes is whether foods are prepared on-site from scratch or are convenience products.

Unless the foodservice is very health-oriented, diplomacy in educating foodservice employees may be called for. The services of an on-site or consulting dietitian/nutritionist may be helpful. Employee support and enthusiasm and increased cafeteria sales may prove to the foodservice supervisor that a healthful eating program is good for the health of their operation, too!

Nutrition for Pregnant and Lactating Women

Worksite health promotion programs can help educate expectant mothers and ease the return to work for nursing mothers.

- In Kimberly-Clark's "Health Management Program," nutrition during pregnancy and breastfeeding is among the health education offerings.
- At Hunterdon Medical Center in New Jersey, the availability of a breast pump and refrigeration helped decrease absenteeism among new mothers.
- Olin Corporation in Connecticut presented the March of Dimes' "Good Health is Good Business" series to more than 100 employees. The series is for women of childbearing age and includes a session on prenatal nutrition.

Diabetes Screening and Education

Weight control and diet regulation are central to the control of noninsulin-dependent diabetes, and may prevent secondary symptoms and complications. Weight control alone can help reduce symptoms of diabetes in some overweight adults. Diabetes screening can be part of a general health screening, done at a health fair, or fit into the normal workday. General education to raise awareness of the symptoms and control of diabetes can be presented at lunchtime or after work, or in a newsletter or brochure. Diabetes education and support groups may be helpful in large companies with sizable diabetic populations.

- At SPS Technologies in Pennsylvania, the local chapter of the American Diabetes Association (ADA) worked with the company medical department to screen employees for diabetes. The company provided a prescreening meal and the few minutes of time off necessary for screening appointments. A health educator from the local ADA chapter presented lunchtime educational seminars.

Planning for Successful Nutrition Activities at the Worksite

While there are no national data available on success rates for the many types of worksite nutrition programs, there are reports of what to expect from certain programs, especially those dealing with weight management and cholesterol reduction. In addition, there are certain keys to success that are usually present in more effective programs.

The results achieved by nutrition programs at the worksite depend on such factors as the motivation of employees to improve their nutrition practices; the quality of the intervention; the monetary and time investments made by participants; and the level of support for healthful eating behavior from family, coworkers, and the company.

Results that Can Be Expected

Participation rates for worksite health promotion programs are generally between 10% and 30% of the work force; however, rates as high as 70% to 90% are possible with high-quality, aggressively promoted programs (e.g., Johnson & Johnson's Live for Life program). Within a year, 5% to 20% of the employee population is likely to participate in weight-loss and/or general nutrition programs. A relatively high proportion of workers with high cholesterol can be attracted to a cholesterol education program; this could be 15% to 20% of the employees in a large company, depending on the age and sex distribution of the employees.

Attrition, or dropout. Roughly 40% to 70% of those who enroll complete small group weight-loss programs, and 70% to 100% complete weight-loss competitions (usually less demanding in terms of regular attendance). Cholesterol reduction programs also seem to have low attrition rates.

- At New York Telephone, 81% of those who started a cholesterol education program completed the series of classes.

Health improvement: weight loss or cholesterol reduction. Average weight loss per person for 27 worksite weight control programs was between 5 and 18 pounds, with longer programs (10 weeks or more) usually achieving larger losses (Glanz and Seewald-Klein, 1986). Cholesterol reductions of between 9% and 17% have been attained in programs running 8 to 24 weeks.

Maintenance of behavioral change and health improvement—weight loss, cholesterol reduction, diabetic control, or blood pressure reduction must be sustained to be effective. Reported maintenance rates are variable, but one conclusion is clear: Long-term success cannot be achieved with short-term programs. This doesn't mean that programs must continue indefinitely, but rather that there should be some plan for reinforcing change, such as support groups or "booster sessions."

- At the Metropolitan Life Insurance Company, employees who complete the Lighten-Up weight control program are invited to join a Lighten Up for Life support group, which meets twice a month. The support group chooses all topics, and participants have developed a recipe exchange club.

Keys to Success in Nutrition Education

Keys to achieving positive dietary behavioral changes and health improvements are as follows:

1. **Nutrition education strategies tailored to company and individual needs,** and **personalized diet and exercise regimens**
2. **Personal interaction** supported by written and other media
3. **Effective leadership and professional staffing**
4. **Participant-provider communication**
5. **Skills training**
6. **Social support** in the workplace and at home
7. **Supportive environmental changes**
8. **Follow-up, monitoring, and reinforcement**

Keys to Success in Worksite Wellness Programs

1. **Careful planning** to design a program to suit the needs, interests, demands, resources, and structure of a company and its employees; also, programs should be based on sound scientific information
2. **Top management support** to minimize roadblocks and gain access to resources and credibility with employees
3. **Employee involvement** in planning, promoting, carrying out and evaluating programs
4. **Professional leadership**
5. **Attention to confidentiality** and the (usually) voluntary nature of participation are important in enabling individual employees to feel comfortable working to improve their health in the workplace setting
6. **Integration of various wellness program components**, including nutrition, fitness, smoking cessation, and cardiovascular risk reduction
7. **Strong and continuing promotional efforts** to communicate the existence of a program, to attract participants, and to inform people about how to become involved

Part 2. Implementation Guide

Program Elements

Successful nutrition programs for employees take many forms, and it is important to consider the key elements and related factors before selecting or designing a program. There are as many different kinds of programs as there are companies, and thinking about the various elements or features of programs prior to development makes it possible to anticipate the costs as well as the benefits that will result.

Seven elements of worksite nutrition programs must be considered: topic, goals, strategies, target audiences, staffing, timing, and location. These elements can be "mixed and matched" to suit the company needs and employee interests. Employers often find it best to offer employees several nutrition program options from which to choose.

1. Topic. The topic generally indicates the health focus (e.g., weight control, cancer risk reduction) or eating pattern (e.g., U.S. Dietary Guidelines, heart-healthful eating) which makes up the program content. Topics such as vegetarianism, fad diets, vitamins and minerals, and nutrition myths may also be used.

2. Goals. The employer needs to define expectations for change in workers who participate in a program. Changes in awareness, knowledge, attitudes, eating practices, physical health/risk factor status, psychological health (e.g., morale, job satisfaction), and work performance (e.g., productivity, reduced absenteeism) may be selected as goals. The type of goal or goals chosen forms the basis for selecting strategies and the program's structure.

The long-range goals of most employers for workplace nutrition activities include healthful eating behavior, better physical and psychological health, and improved work performance. However, it may be unrealistic to anticipate these outcomes from short-term programs. Planners must select goals that match the resources available for the program.

3. Strategies. In general, strategies can be categorized as educational or environmental (organizational/structural). The program(s) may involve a combination of strategies.

Educational strategies include informational, motivational, and behavioral techniques. Informational techniques include handouts or posted nutrition information, as well as lectures, seminars, or audiovisual presentations. Motivational techniques include a wide range of methods to persuade people about the importance of their personal eating patterns and prepare them for change. Behavioral techniques encompass methods such as behavior analysis, self-monitoring, behavioral contracts, social supports, role modeling and "buddy systems." To enhance the potential for success, educational strategies often combine these three techniques in a single program.

Environmental strategies include making healthful foods available in the cafeteria and other ways of restructuring the eating environment (e.g., putting desserts out of easy reach). Point-of-choice information about nutrient content, social influence strategies (e.g., weight-loss competitions, putting scales in restrooms), and incentives (e.g., money, extra personal leave days) are other environmental strategies.

Environmental strategies encourage positive nutrition behavior by creating opportunities for action and removing barriers to following a healthy diet. They can be combined with educational programs or stand alone. Environmental strategies do not require significant time commitments and can reach a large percentage of employees. These strategies also provide simple, often inexpensive ways of motivating employees in small businesses to improve or maintain a healthy eating pattern.

Along with educational and environmental strategies, screening and medical control are important strategies for addressing health concerns like high cholesterol and hypertension. A medical follow-up component is essential for people at very high risk.

4. Target Audience. Three main dimensions to a program's target audience are health risk status, employment category, and individual or group participation.

Health risk status may be key to identifying employees who will derive the most important health benefits from the program. Some examples would be workers who have elevated cholesterol or blood pressure, who are at least 15% overweight, or who have a family history of a nutrition-related disease, such as diabetes. By focusing on the high-risk groups, the employer's investment for better health has the greatest chance of paying off.

The **employment category** of those eligible to take part in a program usually reflects the company's health promotion policy and resources for the program. Categories of eligibility include executives only, salaried workers, and/or hourly and unionized employees; families of employees; and retirees and their dependents. A number of employers believe it is prudent to include individuals who are beneficiaries of company health insurance plans, and therefore part of the company "community."

Nutrition programs can also serve employees **individually or in groups.** This choice often depends on the resources available for a program. Also, nutrition counseling and behavior change groups can address both types of audience by having initial meetings with individuals and conducting the rest of the program in a group.

5. Staff. The staff includes all those who will play a part in designing, conducting, and evaluating the worksite nutrition program, either as a full-time paid job, as part of their job responsibilities, or in a specifically defined volunteer role.

Internal company resources and program goals and strategies determine who will make decisions and develop and implement programs.

Many types of health professionals conduct nutrition programs in the workplace—dietitians, nurses, psychologists, physicians, health and nutrition educators, exercise physiologists, and multidisciplinary health teams. Specially trained employee leaders may provide role models and an inexpensive addition to professional staff.

The next section in this guide offers guidelines for selecting qualified providers. However, it is important to remember that there are many tasks involved in planning, promoting, setting up, and evaluating programs that nonprofessionals can perform with professional guidance and supervision. By using employee volunteers in these capacities, a company can help build a sense of commitment to the program and keep costs down.

Program staff time requirements may vary considerably. Behavior modification programs that meet in professionally led groups once or twice a week involve frequent contact, but a self-management course might require much less of the professional's time. Environmental strategies, such as point-of-choice food labelling in the cafeteria, may involve a large investment of time initially, but very little time for program maintenance.

6. Timing. The following dimensions of program timing are important:

   - **Time of year.** Weight control programs are popular right after the New Year's Day or as summer approaches. Certain cafeteria programs can be introduced effectively during Heart Month, National Nutrition Month, Cancer Control Month, and National High Blood Pressure Education Month. Program start-up is not recommended during heavy business seasons—budget time, when contract bids are due, or tax season (in an accounting firm)—as this will limit participation.
   - **Frequency and length of sessions.** Select the session timing that allows people to stay through the entire session, encourages continued participation, and promotes successful behavior change. Most sessions cannot realistically last more than one-half to one hour, and workplace weight loss programs typically range from 6 to 16 weeks in length. Some companies have found it feasible to hold meetings more than once a week.
   - **Timing in relation to the work day.** The most usual times of day to offer programs are before and/or after work and during lunch hours. Scheduling decisions depend on commuting distance, location (city or rural area), length of workers' lunch hours, and whether the activity will take place off-site.

Some employers allow workers time to attend nutrition and wellness activities during the workday. Alternatively the program might take place half on company time, and half on employee time.

- **One-time vs. ongoing programs.** A popular program—for example, a low-fat cooking course—can be repeated every few months. Planners should explore reasons why other programs might have been poorly attended before deciding whether or not to repeat them.

7. Location. Programs can be held on-site, at the facility of a course provider, or at a rented community facility such as a hotel conference room or university classroom. In choosing the program location, consider program timing in relation to the workday, whether the program serves a single company site or several sites, commuting distance to and from work, and the availability of suitable space at the company.

Easy access for participants is important. Programs with high participation rates typically are those which are offered at the company.

For small businesses or sites with a limited number of participants, tuition reimbursement can be provided for attending nutrition and wellness courses in the community. This approach, which also meets the needs of workers living in rural areas or in service jobs, is used in the IBM "A Plan for Life" employee health education program.

Selecting Qualified Providers and Programs

How can your company sort through the myriad of nutrition and weight control programs and providers available in your community? One way is to talk with other businesses who have experience and get their recommendations. However, the final decision must be made on facts gathered by your company and analyzed in the light of your specific resources and needs.

Key **program** or course elements include:

- Development by a qualified expert, with an outline available for review
- Up-to-date information that is free of misleading claims
- Completeness: information, motivation, skills development, and techniques for behavior modification
- Attractive, easy-to-read materials
- Good fit with your specific needs: length of sessions, length of course, employee health concerns, appropriate for literacy levels, suitable for minority or ethnic populations, fee structure

It should **not** be a vehicle for selling or promoting any food product, diet aid, or nutrient supplement.

Remember that you are the consumer and can request as much information as you want before selecting the **provider** that best meets your needs. Some factors to consider:

- **Credibility,** including affiliation with a respected community organization such as a voluntary health agency, hospital, health department, Extension Service, or regionally accredited university; and/or membership in a major national professional association

- **Training and qualifications,** including formal training in nutrition, health care, nutrition education, and/or psychology. Depending on the program you plan, training needs will vary.

    - It is important to remember that people with a wide variety of backgrounds refer to themselves as "nutritionists," and not all have completed a uniform course of professional training. *Registered dietitians (R.D.)* are nutritionists qualified by education, experience, examination, and continuing education to maintain professional competence. The label *nutritionist* refers to a broader category of professionals with training in human nutrition.

- **Experience** in nutrition education and with worksite nutrition programs, and skill at working with groups. Do not hesitate to ask for references, an interview with the person who will be teaching the course, permission to observe a current program, or written evaluations and results of previous programs.

- **Quality assurance mechanisms,** including training, supervision, and evaluation of instructors

If you need help in finding qualified nutrition providers, contact your state or local affiliate of The American Dietetic Association, the state or local nutrition council, Extension Service, state or local health department, or the Provider Directory in the *Journal of Nutrition Education* Worksite Supplement.

Offering Employee Incentives

Sometimes people need encouragement to join a nutrition program or change eating habits. Many companies have recognized this, and incentives are effective motivators for employee health promotion activities. T-shirts, rebates on course fees, or cash payments can encourage people to enroll in a program, change a habit, or maintain a healthful lifestyle change.

Using incentives in worksite nutrition programs is a logical extension of businesses' success in using incentives to improve work performance. The best incentives are rewards or recognition that foster a sense of management-employee collaboration.

Types of incentives that companies use in their nutrition programs include:

Corporate Policies and Practices, (e.g., offering to pay the cost of the program, and offering it on company time):

- The Tacoma-Pierce County Health Department in Washington offers a computerized dietary analysis and feedback on location during work hours, and the company and employees share the cost.

- At L. L. Bean in Maine, workers who are at high risk of heart disease due to known risk factors are eligible for free blood cholesterol screening.

- At one National Institutes of Health employee cafeteria, people were given money-saving coupons to get them to try "healthful" food specials.

Personal or Team Recognition:

- In weight-loss competitions at banks in Williamsport, Pennsylvania, team weight losses were posted each week to encourage all the teams to try harder.

- At Union Carbide, employees receive diplomas for completing a weight-loss course.

Team Competitions:

- Central States Health and Life Company of Omaha, Nebraska rewards winning teams in weight-loss competitions with money pledged in a pool.

- If a competition is conducted between departments or units within a company the winning unit might receive a cash bonus or extra personal leave days.

Awards, Prizes, and Gifts:

- Johnson & Johnson uses an extensive incentive program for participation

in its Live for Life program, and people can accumulate points for the "purchase" of special gifts.

- At the Campbell Soup Company, employees receive T-shirts for participating in nutrition programs.

- Southern New England Telephone in Connecticut gives a $10 gift certificate to each worker who reaches his/her weight goal within 3 or 6 months.

- Union Carbide gives participants who meet their weight-loss goals a 25% rebate, and a 25% discount on future health education class fees.

- In Rodale Press's "Lose Weight and Gain" incentive system, workers are awarded $5 per pound for weight loss between 5 and 50 pounds, but they are required to pay back $10 per pound gained back.

Health Care and Employee Benefits: Rewards tied to work activities or health benefits are used by employers who recognize that healthier employees have higher productivity, less absenteeism, and lower health care costs.

- Western Printing in Omaha shared with its 37 employees the rebate it received from its health insurance carrier because health insurance claims decreased in 1985 after a health promotion awareness campaign.

Many companies have improved the success of their nutrition and wellness programs by using incentives. Incentives do not need to be expensive or large, but they can add the extra of motivation and excitement that it takes to get people to start, continue, and succeed in improving their eating patterns.

Program Promotion and Communications

The overall success of your worksite nutrition program will depend on effective in-house promotion and communication about the program. Even the best program can go unnoticed if managers and workers do not know what it has to offer and how to take advantage of it. While a nutrition program can be promoted as part of the publicity campaign for an overall health promotion program, some unique features of nutrition programs deserve special attention.

There are two phases of promotion: (1) promotion to management and (2) promotion to all employees (and their families and retirees, if eligible).

Promotion to Management

Management must be completely sold on a worksite nutrition program before there is a budget and cooperation to carry it out. Endorsement of managers at all levels can make or break the program implementation.

The goals of selling a nutrition program to management are: (1) explain the purpose of the program, (2) clarify program benefits, and (3) gain commitment to the program. A meeting with a well-prepared visual presentation can serve this purpose.

If you are planning a cafeteria program, cooperation of the foodservice management is essential. This can present a variety of challenges, depending on whether the company uses an outside vendor or runs its own foodservice. Research the implications of developing healthier cafeteria fare, in terms of whether foods are prepared from scratch or convenience foods are used. A good approach is to focus on the cafeteria's "bottom line." Alternative menu options can be money-makers if they attract new customers who were brown-baggers because the food choices did not suit them.

Promotion to Employees

Once you have established a program, you will need to make it visible and be sure that the employees (and their families and retirees, if eligible) know how to become involved. Suggestions include:

- **A general presentation to employees** describes the philosophy and activities of the program and is often a good time to get people to sign up.
- **Articles in the company newsletter** let employees know that a program is coming soon, give details about registration, and provide examples of past program successes.
- **Posters and table tents** around the company, and in the cafeteria are excellent ways to advertise the program and specific events.

- **Paycheck stuffers and desk drops** can be clever program reminders that reach every employee.

- **Promotional offers** can include coupons for special foods in the cafeteria or a discount on employee contributions for a weight-loss course.

- **Introductory sessions** give workers a sample of longer nutrition education courses that are available.

- **Promotional events** can include a cooking demonstration by a local celebrity or an aerobics demonstration followed by healthful snacks.

- **Computerized dietary analysis.** A computerized dietary analysis is a good promotional gimmick for getting people interested in nutrition courses or behavior modification groups. This can be done by completing and mailing in a form, or by bringing a portable computer terminal with dietary analysis software into the cafeteria, where people can analyze their meal or their day's food.

- **Employee involvement and ownership.** No one can promote a program better than the employee who has had a role in designing it. Employees who have had some success with a program also are good at attracting new participants. Employee task forces should be formed and successful participants should be enlisted to share their successes with others.

Before starting a promotion, check company rules about posting or distributing publicity in the company. If there is an in-house communications department, enlist its help in publicizing the nutrition program. Professional-looking materials will add to the image of the program.

It is a good idea to select or design a name and logo for the program at the start, so it can be recognized and associated with each activity. It is equally important to vary the publicity, so employees do not get used to seeing the same things.

Involving Employees

Involving employees in developing, promoting, and running nutrition activities is essential for success. It helps to create a sense of employee ownership, strengthens commitment to a healthful lifestyle, generates ideas and opinions, and helps tailor the program to the needs and interests of the worksite. In unionized companies, it is important to include the union in program development, so that activities are consistent with negotiated benefits and garner union members' support.

Participation in Planning

A nutrition task force or planning committee can plan programs that will meet the workers' needs and interests, see to the details of program preparation, and initiate new activities that employees want. Many companies find it helpful to form committees made up of respected employees who represent various staff levels and types of employees. Benefits to task force members include opportunities to develop leadership skills and receive recognition for their work.

The task force will usually conduct some type of assessment (formal or informal) to determine employee needs and desires. This might take the form of casual discussions with work groups or a more formal employee needs and interests survey.

- At the Minnesota Heart Health Program (MHHP), focus groups were used as a preliminary planning step for nutrition programs in six worksites of varying types and sizes. The groups consisted of four to six employees and were led by a Heart Health Program nutritionist with group process skills. Groups answered a structured set of questions that gave the MHHP a clear picture of the best types and formats for nutrition activities at that worksite.

- When one interested person at Southern New England Telephone finds at least seven other people who want the same class, they determine a convenient time and location for everyone and the nutrition coordinator provides an instructor for the group.

Participation in Promotion

An employee planning group also can spread the word and encourage co-workers to take part. A telephone network can be set up to inform or remind workers about a forthcoming activity. Employees can wear promotional T-shirts and buttons or use pencils with the program logo to create visibility. However, the best publicity comes from word-of-mouth. The person who benefited from a heart-healthful cooking class or lost weight in a worksite competition is a living advertisement for health.

Participation in Carrying Out the Program

There are many roles for employees once a program is under way. Employees can assist with tasks like registration, attendance, and recordkeeping. Company health professionals can help lead nutrition activities. For example, a hospital dietitian can use her nutrition education skills for the hospital's employees as well as for patients.

Some nutrition and weight control programs use other employees as group leaders to help run the programs. These are usually people who have successfully completed the program, changed health habits, and received special training to be group leaders. They serve as motivational examples for participants and can also help keep staff expenses down.

- In a hospital in Rhode Island, volunteer leaders for weight-loss groups were elected by participants. These volunteer leaders worked in pairs and were trained and supervised by professionals. The weight-loss groups led by these pairs were as successful as professionally-led groups, but only 56% as costly.

- At the United Storeworkers Union in New York City, the cost per pound lost was $6.35 using lay leaders and $18.81 with professional leaders; that is, the lay-led groups were only 34% as costly for equal success.

To keep the involved workers enthusiastic, it is a good idea to change the planning committee membership periodically. Participants get an extra "energy boost" from recognition and appreciation for their efforts.

Employee involvement is the best way to make your nutrition activities effective, and to promote teamwork and a sense of community while building a healthier work force.

A Step-by-Step Framework for Developing Worksite Nutrition Activities

A framework that companies can use to develop or improve their nutrition program efforts is outlined in this section. The steps for program development are:

- research the issue and conduct a needs assessment
- gain top management commitment
- gain employee commitment
- develop policy, environmental changes, and educational programs
- plan the implementation
- announce the program
- implement the policy
- provide information, education, and incentives
- obtain feedback (and revise the program if necessary)

These steps will not necessarily occur in this order in your company, but it is important that each action be considered and that those steps selected be carefully carried out. Improving the health of employees through worksite nutrition programs is sometimes a slow process, but most companies that have conducted programs recommend a methodical and gradual approach to changing long-standing organizational factors and employee behaviors.

While much of the responsibility for developing and implementing a nutrition program can be delegated, it is vital to the success of any effort that the company's executives play active, visible roles. Specifically, to help ensure that the goals of the program will be achieved, organizational decision makers must, at a minimum:

- actively influence other managers to support the development of a strong nutrition program
- help draw up policies for environmental changes including the foods offered in company cafeterias and at meetings
- make certain the program includes information, educational programs, and incentives
- ensure employee involvement, including unions, at all appropriate levels
- support environmental changes that reinforce nutrition education programs
- make visible public appearances and statements to top and middle management and to employees, families, retirees, trustees, and stockholders.

A description of the suggested steps for planning and implementing (or improving) a successful nutrition program at the worksite follows.

1. **Research the Issue and Conduct a Needs Assessment**

   - Identify an individual at the management level to be responsible for gathering and analyzing all the comments, complaints, and issues that have arisen within the company regarding food availability and needs for nutrition education and/or weight control programs. Include employee and client comments, as well as union and board actions.

   - Review data about the health and economic consequences of poor nutritional habits and nutrition-related health risks.

   - Look at other companies' foodservices, cafeterias, policies, incentives, education programs, support mechanisms, and achievements. Where possible, talk to the key manager involved.

   - Survey employees to determine their attitudes about nutrition and the workplace, their specific concerns and interests, how they feel about possible programs, and whether they are interested in participating.

   - Consult with the company medical department, the foodservice department, and a professional consulting dietitian or nutrition educator to determine specific nutrition-related health risks in your employee population.

2. **Gain Management Commitment**

   - Make a top management level decision to develop a policy that sets the stage for a combined environmental-education program to promote good nutrition at the worksite. Get clear agreement on why this program is important to the company and what the organization hopes to accomplish through it.

   - Obtain commitment to the policy from all key managers, including those who are overweight or have high cholesterol or diabetes.

3. **Gain Employee Commitment**

   - Find allies within the worksite, such as the occupational physician and nurse, a nutritionist in the medical department, a foodservice dietitian, labor representatives, and benefits and personnel representatives.

   - Include employees who are already engaging in healthful eating practices (e.g., the formerly overweight) as well as those who can benefit in immediate ways from nutrition programs (diabetics, obese, hypercholesterolemics) on the planning committee.

- Form employee task forces to work on promotion, implementation, and evaluation of environmental changes and nutrition education programs.

4. **Develop Policy, Environmental Changes, and Educational Programs**

- Assign responsibility for policy and program proposals to a respected member of the key management team, who may be assisted by technically qualified professionals in the company and/or outside consultants.

- Review policies and programs from companies with similar goals, and available program packages from community and commercial sources.

- Examine union contracts to determine whether they have any provisions for nutrition-related health promotion programs.

- Draft a policy and program outline that specifies nutrition and health objectives appropriate for the company. Include details about why it is important to improve the nutritional well-being of employees, what the program goals are, what environmental and educational approaches will be used, and how they will be implemented.

- Gain support for the written program plan from top management.

- Meet with middle managers to present the nutrition program plan, advise what will be expected of middle managers, and discuss how employees will be involved in developing the implementation plan. Allow time for discussion, and welcome comments about the kinds of problems these managers anticipate.

- Meet with representatives of unions and other appropriate employee groups to present the nutrition program plans and discuss how the groups will be involved in the implementation. Allow time for discussion, welcome comments about anticipated problems, and seek support for the plan.

- If appropriate, take your plan back to top management with recommended revisions.

5. **Plan the Implementation**

- Select or hire a staff person to oversee the nutrition program implementation. In most companies, working only with nutrition programs will not be a full-time job.

- Establish, or continue to work with, an employee committee to recommend ways to implement the nutrition activities. Include representatives from all levels of employees, from unions and other appropriate employee groups, and from various locations (if the company has more than one site).

- Ask the committee to address specific aspects of implementation, such as promotional campaigns, options for weight control programs, incentives, support groups, space needs, and scheduling.

- To the extent possible, set up systems to evaluate the long-term health and economic impact of the nutrition activities.

6. **Announce the Program**

- Announce the environmental and educational programs to employees. Depending on the extent of the activities, provide from 1 to 3 months for comments and suggestions about specific aspects of overall program implementation.

7. **Implement the Policy**

- Invite employees to open meetings to explain the rationale for nutrition focused activities, the environmental changes planned, and the educational programs planned. If possible, involve a company executive in the meetings.

8. **Provide Information, Education, and Incentives**

- Provide information about reducing health risks through good nutrition to all employees and, if possible, to their family members as well. Use as many strategies as possible, such as print items (e.g., letters sent to homes), posters, films, closed-circuit TV, games and quizzes, exhibits and displays, lectures, and small group discussions. Take advantage of existing in-house communication channels such as newsletters and bulletin boards. This informational campaign is aimed at raising awareness about nutrition and setting the stage for the environmental changes and educational programs to come.

- Offer several weight control program options for overweight employees who wish to lose weight. If possible, include a range of methods and arrangements (small groups, competitions, self-management materials, etc.).

- Distribute information about nutrition programs available in the community from reputable groups such as the local Heart Association, Red Cross, American Cancer Society, Dairy Council, Cooperative Extension Service, health department, and hospitals.

- Offer programs that meet employee needs, and incentives to encourage and reward those who lose weight and/or lower their blood pressure or cholesterol.

9. **Obtain Feedback**

- Continually monitor all aspects of the programs and provide feedback to the managers reponsible. Be flexible enough to make changes in the overall plan if they appear to be called for and are in keeping with the original goals.

- Consider maintaining an employee advisory committee to address changes in the programs and activities once they are under way.

- To the extent possible, evaluate the results of all nutrition activities. Gather data on numbers and percentages of employees who lose weight, lower their cholesterol, reduce their blood pressure, and so forth. Gather data on changes in absenteeism and productivity, health care costs, sales volume in the cafeteria, and employees' opinions of the programs.

- Consider implementing additional environmental changes such as providing vending machines with healthful snacks, establishing walking clubs to complement weight control programs, and installing refrigerators in convenient locations.

Part 3. Examples and Resources

Examples of Successful Worksite Nutrition Programs

These examples highlight unique and interesting approaches from companies of all sizes. They are not intended to represent any company's entire nutrition or health program. Information was gathered through written reports and/or telephone interviews and reviewed by the companies prior to publication.

Atlantic Richfield Company (ARCO)

1,300 employees

ARCO's "Food, Fitness, and Your Lifestyle" program demonstrates that videotapes developed by nutritionists can be effective in programs that use other health professionals as instructors for a nutrition and weight control course.

Recognizing the need for a nutrition and weight control program for its employees, the Atlantic Richfield Company (ARCO) invited a nutrition consulting organization to develop a program that would be applicable for both white-collar and blue-collar workers, easy to implement in a half-hour to one-hour time frame, and could be taught by health professionals with different backgrounds. The "Food, Fitness, and Your Lifestyle" program utilizes videotape presentations, nutrition handouts, and hands-on activities for its 9-week program.

The program consists of an introductory general nutrition session and an eight-week weight control course. The course is designed to aid participants in developing the positive lifestyle habits needed to regulate weight. Participants are weighed weekly and have lost an average of 8.5 pounds by the end of the course. Program evaluations show that knowledge, attitudes, physical activity, and eating behaviors improved as a result of the program.

According to participating employees, the most helpful sessions were "Calorie Sources and Portion Control," "Goal Setting for Success," "Being More Active," and "New Habits." Participants unanimously said they would recommend the program to co-workers.

Campbell Soup Company

1,500 employees at New Jersey headquarters
40,000 employees worldwide

A high quality of life for all Campbell employees worldwide is the goal of the Turnaround Health and Fitness Program. Incentives play an important role in this program's success.

The Campbell Soup Company first began an employee health promotion program in 1968, with its Atherosclerosis Prevention Program offered through the medical department. The Turnaround Health and Fitness Program began at Camp-

bell's in 1982 in an effort to improve the health and quality of life among employees, their families, and the surrounding community, and as an effective strategy for health care cost containment. Because health is directly related to lifestyle patterns (e.g., weight, fitness level, eating habits), the Turnaround philosophy challenges individuals to take charge of their lifestyles by making a personal commitment to well-being. As part of the Turnaround Program employees receive a nutrition profile and computerized dietary analysis. Nutrition lifestyle programs include general nutrition classes, Turnaround to Weight Management, the American Heart Association's Culinary Hearts Kitchen course, and STRIP (Spare Tire Reduction Incentive Program). Currently 902 employees are active in nutrition programs.

Campbell's offers incentives to encourage employees to enroll in a variety of programs. Participants receive "aerobucks" for every nutrition program they attend. The aerobucks can be used toward purchasing fitness equipment and apparel.

STRIP uses incentives extensively and successfully. This 3-month interdepartmental weight-loss challenge is held annually, and most recently boasted 230 participants and 3,078 pounds lost. T-shirts are awarded to participants achieving at least 50% of their weight-loss goal and the winning team receives custody of the floating "Fat Cup." Employees say that group pressure is the strongest motivator of all.

The Turnaround to Weight Management program, "Mind-Over-Weight," is the most successful weight control program. Psychotherapy, meditation, and behavior modification teach participants about why they eat and have resulted in positive lifestyle changes. "Mind-Over-Weight" participants have lost an average of 2.3 pounds per week. One-on-one counseling is also available, and reevaluation of the computerized dietary analysis is conducted after three, six, and 12 months.

Control Data Corporation

35,000 employees nationwide
25,000 employees in Minnesota

The STAYWELL program developed by Control Data Corporation uses a behavioral approach in its nutrition programs. Weight control, the most popular program, has modified eating habits and resulted in weight loss and healthier meals.

Control Data Corporation (CDC) began its nutrition programs in 1979 as part of an overall wellness program. The primary reason for development of the STAYWELL program was cost containment in employee health care. The STAYWELL program is paid for by the company and all employees and their spouses can attend before and after work hours and during lunchtime.

Four nutrition programs are available as part of the overall STAYWELL program: a weight control program, a general nutrition class, a diet and heart disease program, and a nutrition assessment. Weight control, the most popular course, was

recently attended by more than 100 employees. This course, taught by a health educator, is ongoing throughout the year and consists of 6 sessions. A behavioral approach consisting of these steps is the most common teaching method: assessing behavior, goal setting, monitoring progress, rewarding oneself, and goal revision. Employees report that keeping food records (part of assessing behavior) is the most valuable part of the program. Hands-on activities, group discussion, and problem solving personalize the course and help keep employee interest high. Cookbooks and books on nutrition and weight control are given to employees as incentives to participate in the nutrition program. The average employee has lost 8 pounds, regaining only 1 pound during the following year. Use of butter, salt, and sugar have been drastically reduced, and daily eating habits have improved significantly.

Dupont Company

4,000 employees at Wilmington, Delaware corporate headquarters

Incentives such as pens, magnets, the "Eat and Stay Slim" cookbook and group support help employees at DuPont lose weight permanently.

Health Horizons, DuPont's employee health improvement program, offers extensive nutrition programs, including courses in weight control, general nutrition, and heart disease, and individual counseling, at many DuPont sites. Courses are taught by a registered dietitian and are available to all employees and their family members. Several DuPont sites also offer heart-healthful vending machine and cafeteria programs.

In March and May, 1985, DuPont conducted its first Sensible Weight Loss course for over 400 employees at its corporate headquarters. To participate, employees had to be at least 10% overweight. They were encouraged to have their percentage of body fat determined by skinfold measurements and to keep food records. The main objective of this 6-week course was to modify eating behaviors through increased nutrition knowledge and physical activity so that weight would be lost and kept off permanently. Incentives such as pens and magnets imprinted with the Health Horizons logo were given to encourage participants to maintain daily food records. The "Eat and Stay Slim" cookbook was presented to all participants who lost 7 or more pounds, or who met their weight-loss goals.

The average weight loss was 5.5 pounds per person and 85% of those who lost weight maintained their losses for 3 months or more. Forty-five percent of the participants reported exercising 3 to 6 times weekly. Support groups now meet monthly to encourage success at maintaining or continuing weight loss.

John Hancock Life Insurance Co.

8,500 employees in home office

Group enthusiasm and support are said to be two of the most important components in a weight loss program, and participants in John Hancock's annual weight loss competition certainly agree.

Believing that "you don't have to be sick to get better," the John Hancock health education division provides a wide range of educational programs to employees in an effort to prevent disease and disability and achieve a high level of wellness. As part of the Positive Lifestyle Management Program, John Hancock employees and their families benefit from a wide range of nutrition programs. These include weekly weight monitoring clinics, Taking Charge of Your Weight and Well-Being, Healthy Heart Program, the American Heart Association's Culinary Hearts Kitchen course, a weight-loss competition, and nutrition assessments. As part of a nutrition education series, John Hancock employees have been invited to a special Diet, Cancer, and Nutrition forum, a compulsive eating seminar, and a dieting fallacies seminar. In addition to nutrition brochures, displays, and audiovisual resources, there is "Healthline," a regular feature in the company's newsweekly.

In January 1985, employees had the opportunity to participate in the First Annual All-John Hancock Weight-Loss Competition. This unique group competition involved weekly weigh-ins. Information on nutrition, weight control, exercise, and behavior modification was given to each participant. There was a $5 entry fee, and the team achieving the greatest percentage of its weight-loss goal won the entry-fee pool. Twenty-two teams (187 employees) participated in this highly successful program.

The approximate weight loss per person was 6.5 pounds and 56.5 pounds per team. Many cited group support as their favorite aspect of the program; employees said they could not have done it on their own. The majority reported that they had become more aware of their eating behaviors. Competitors also saw the emphasis on changing eating behaviors over time, rather than drastic weight reduction, as a positive aspect of the program.

One recent addition to John Hancock's overall efforts to promote good nutrition was the publication of a special "Background Extra" issue of the *John Hancock Newsletter* called "Putting Nutrition to Work." The attractive, colorful, glossy 28-page periodical contains several articles about nutrition and was distributed to John Hancock's group health insurance brokers and clients.

Johnson & Johnson

35,000+ employees worldwide

The mission of Johnson & Johnson's Live for Life program is to help the corporation have the healthiest employees in the world and to contain rising health care costs. Weight control, cafeteria, and nutrition action programs are helping to achieve this goal.

Johnson & Johnson (J & J) began its Live for Life program in 1980. Participants in the program take part in a lifestyle health screen that includes a physical examination and lifestyle questionnaire. Results of the screening are confidential and are used to identify the ways participants can begin to improve their lives. Nutrition courses are an important component of the program and include weight

control programs, general nutrition classes, cafeteria programs, the American Heart Association's Culinary Hearts Kitchen course, and a nutrition assessment. Nutrition brochures, displays, and audiovisual resources are available at no cost to all employees, their spouses, and retirees.

The weight control program, offered three times yearly, is taught by a nutritionist with a background in behavioral sciences. The program contains 13 modules on various nutrition and behavioral topics such as how food choices are made, eating habits, exercise habits, basic nutrition information, eating at home, and eating away from home. Participants in the 8-week course are taught the module that matches their interests and needs.

As with every core program in Live for Life, employees who participate earn points (Live for Life dollars) which can be redeemed for premiums such as mugs, T-shirts, and luggage. According to follow-up evaluation data from the health screens, J & J employees at work sites offering the Live for Life program had lower cholesterol, triglycerides, and blood pressure, and were less overweight than employees at sites that did not have the program.

The cafeteria nutrition program communicates information about fat and cholesterol content of foods through point-of-purchase labelling and posters. Healthful vending machine snacks are available and one-time health education sessions called "Lunch and Learn" are presented regularly. Half to three-quarters of the lunchtime sessions address nutrition topics.

L. L. Bean, Inc.

1,350 employees

L. L. Bean has successfully revitalized its lifestyle education program by offering a blood cholesterol screening for employees identified as being at high risk for heart disease.

L. L. Bean began its Health and Fitness Program in September 1982 and introduced a lifestyle education program a few months later. After a successful first year, interest in the program decreased. A blood cholesterol screening for employees was initiated to increase employee health awareness and participation in the lifestyle program. As a result, the L. L. Bean Heart Club now boasts 70 members and the program has been revitalized.

Although L. L. Bean offers a variety of nutrition programs (a weight control program, general nutrition classes, nutrition assessment, nutrition brochures and movies, cooking classes, and taste-testing demonstrations), the heart disease prevention program has been its most successful. Employees identified at high risk for heart disease were eligible to have their cholesterol level tested at company expense. The testing was also available to other employees at cost ($13).

All employees who had the cholesterol testing were invited to attend 2 one-hour educational sessions on cholesterol and their diet. Employees found to be at high risk through the cholesterol screening could also join the L. L. Bean Heart Club, a 15-week education program on fat reduction, menu planning, cooking, exercise, and relaxation techniques.

Seventy percent of the 77 Heart Club members had their blood cholesterol tested 8 months after the beginning of the program. Cholesterol levels for this group decreased an average of 14%, for an estimated 28% decrease in their risk of heart disease. 70% of these individuals decreased their intake of saturated fats. 89% increased their intake of polyunsaturated fats, and 97% thought the screen was worthwhile. Participation in nutrition programs has increased from 5 to 70 employees as a result of the cholesterol screening program.

L. L. Bean offers nutrition programs to all employees, family members, and retirees. These courses, paid for by the company and taught by qualified staff, take place at the workplace before and after work hours and during lunchtime.

Lockheed Missile and Space Company

24,000 employees

At six sites in California, 2,499 Lockheed employees, retirees, spouses, and dependents joined the "Take It Off '83" campaign, a weight loss program stressing competition and self-responsibility. They lost a total of 14,378 pounds in three months, at a cost of only 94 cents per pound lost.

At Lockheed Missile and Space Company, a major focus of the company health promotion program has been to motivate weight loss in a cost-effective manner. It incorporated concepts of competition and self-responsibility into a multi-site program called "Take It Off '83."

The program was open to employees, retirees, spouses, and dependents at six sites in and near Sunnyvale, California. Each person could enter individually or as a member of a team. People set their own weight loss goals of between 5 and 24 pounds for the 3-month program.

Following an intensive publicity campaign, nine weigh-in stations were set up throughout the six sites. When participants weighed in and set their goals, they received an information packet on weight, exercise, cholesterol, and related company activities. All information was entered into a computerized data base program.

During the competition, there were written materials, a film, events such as a nutrition fair and body fat testing, a one-hour seminar on behavior modification, and scales left at the weigh stations so participants could monitor their progress. Also, the teams could offer extra materials or organize special activities on their own.

Seventy percent of the employees "weighed out" at the end of the 3 months. Of these, 92% lost weight, and the average weight loss was 9.1 pounds.

Overall, the program was more successful for men than for women. The men lost more weight and came closer to achieving their goals. Also, people who entered as part of a team did better than those who entered as individuals.

The cost of the weight control program within the existing health promotion program was about $13,500, or $5.40 per initial participant and $7.67 per person who completed the program. The total amount of weight lost was 14,378 pounds at a cost of 94 cents per pound lost.

Lockheed's weight loss competition is a good example of how a program can reach a broad based population in a cost-effective manner. Competition and self-responsibility seem to have produced excellent weight loss results in the company. (The program is reported at greater length in the *Journal of Occupational Medicine*, Vol. 26, No. 10, October 1984, pp. 725-730.)

Mattel Toys

2,000 employees at corporate headquarters

A well-developed cafeteria program such as the one offered in Mattel's Health Enhancement Program can help motivate changes in the amount of sodium, fat, and calories consumed by employees at lunchtime.

As part of their Health Enhancement Program (HEP) at corporate headquarters in southern California, Mattel Toys made several changes in its employee cafeteria. The cafeteria, partially subsidized by Mattel, serves lunch to approximately 1,250 employees each day, and offers hot and cold entrees, grilled foods, soups, a salad bar, and desserts. Frozen foods and vending machines also are available. One of the changes made by HEP was to modify menus to adhere to the U.S. Dietary Guidelines. Low-calorie, low-salt, and low-fat foods are offered daily, and a greater variety of fresh vegetables has been added to the salad bar. Food items such as fresh fruit and low-fat milk were relocated to increase their accessibility.

The HEP nutritionist and her assistants also developed a food labelling system utilizing colorful comparison cards. These cards show the amount of sodium, fat, and calories for various food items. The cards are used in pairs so that two similar foods can be compared for nutritional value and the employees can make informed choices between two entrees or two desserts.

As a result of the food labelling, employees significantly decreased the amount of sodium and the number of calories they consumed. The amount of fat eaten was slightly reduced. An evaluation is being conducted to learn employees' opinions of the labelling program.

The Health Enhancement Program also provides workshops on weight control, general nutrition, and cholesterol reduction. Monthly food demonstrations with a presentation, food sample, and recipe are among the cafeteria programs.

Metropolitan Life Insurance Company

8,000 employees

During the six years since it began, over 1,700 employees have participated in Metropolitan Life Insurance Company's health education group program offered through the Center for Healthy Living and at least 8,300 have received individual counseling and/or used available resource materials.

Since January 1979, Metropolitan Life Insurance Company's Center for Healthy Living (formerly the Center for Health Help) has offered nutrition education programs to employees as an integral part of a comprehensive package of educational programs. Nutrition information is provided for employees nationwide on a regular basis. In the home office, programs are held before, during, and after work hours, and are offered free to all employees, their family members, and retirees. While nutrition information is included in nearly all Center programs (e.g., diabetes education, stress management), nutrition is the central focus of three: cholesterol reduction, nutrition education, and weight control.

The objective of the cholesterol reduction program is to teach participants how to modify their lifestyles to reduce cholesterol and heart disease risk. Employees with blood cholesterol levels greater than 220 mg/dl may participate in this program, which consists of two 1½ hour sessions on company time. After the education sessions, follow-up blood tests and counseling are given at 3- and 6-month intervals. Over a six-year period, 664 employees have completed the program, achieving an average 7.26% decrease in cholesterol levels.

The Food for Thought program is a nutrition education program designed to inform participants about good nutrition and help them modify their lifestyles to reduce risks for cardiovascular disease and cancer.

Lighten-Up is a weight control program which helps employees learn how to make healthful food choices and get regular exercise. Participants learn to select foods low in calories, fat, and cholesterol and to make a commitment to exercise on a regular basis. Classes meet once weekly for 7 weeks; during this time participants maintain food records and physical activity charts. In four years, 570 employees participated in the program, and lost an average of 7 pounds each. After completing Lighten-Up, employees are invited to join the Lighten Up For Life support group, which meets twice a month. Lighten Up For Life helps employees maintain and continue weight losses through small group support. The group chooses all topics, and participants have developed a recipe exchange club.

In addition to these educational programs, Met Life has a cafeteria program called Take Health to Heart. Low-fat, low-cholesterol, low-sodium, and low-calorie

foods are identified by a red heart on the menu board. Healthful snacks are also available in the vending machines at the home office.

An important part of the nutrition education efforts of the Center for Healthy Living is Met Life's Eat Well, Be Well® program. This program features videotapes, a cookbook with nutrition and weight control information, and incentives which highlight the U.S. Dietary Guidelines for Americans and the importance of healthful eating patterns.

Olin Corporation

900 employees

For small and medium-sized companies like Olin Corporation, the use of voluntary health agency programs offers employers affordable, high quality health education programs that can be tailored to meet the needs of their employees.

Recognizing that 68% of women of childbearing age are now part of the work force and that 30% of U.S. births in 1983 were to women who worked while pregnant, the Olin Corporation invited the March of Dimes Birth Defects Foundation to present its "Good Health is Good Business" seminar to company employees. All employees were encouraged to attend the program entitled "Birth Defects: A Review of Nongenetic Causes," and about 100 employees, two-thirds of whom were women, took advantage of the opportunity. The seminar was aimed at teaching employees that health and lifestyle habits can affect their own and their future children's health, and prevent low birthweight infants. The course includes sessions on prenatal care, nutrition, genetics, smoking, alcohol and drugs, and environmental influences.

The session on nutrition includes information on calorie requirements during various stages of pregnancy, the relationship between a mother's food choices and the health of the fetus, and special diets for obese pregnant women, patients with phenylketonuria (PKU), and vegetarians. Male employees found that the information helped them to be more supportive in helping their wives alter lifestyle habits that could be harmful to the baby. The program was so well received that a follow-up series is being planned.

Management felt that the program gave them greater insight into pregnant employees' health needs. The management at Olin realizes that healthy employees and children can help reduce the cost of medical care, medical insurance, and costs to the company due to employee or family illness and absenteeism.

Other nutrition programs offered at Olin include Weight Watchers,® nutrition counseling, and Life Steps. Life Steps, developed by the National Dairy Council, is a 19-session weight management course that includes weekly weigh-ins, a food diary, and recording of body measurements taken at the beginning, middle, and end of the course. The course is taught by a registered dietitian and uses nutri-

tion information, behavior modification, and physical activity to help participants change their lifestyles and lose weight and inches for life.

Rodale Press, Inc.

900 employees

Employees and local charities benefit from the "Lose Weight and Gain" Program, a unique incentive system using monetary awards and pay-backs depending on an employee's weight loss or gain.

Rodale Press offers its 900 employees, their families, and retirees nutrition programs that are paid for by the company and taught by health educators, dietitians, and the foodservice director. Courses offerings include weight control programs, general nutrition classes, cooking classes and taste-testing demonstrations. A cafeteria program, individual nutrition counseling by a dietitian, and audiovisual materials are also available.

When employees join the year-long weight control program, they are offered the unique "Lose Weight and Gain" incentive system for weight loss and maintenance. This four-year-old program is open to employees needing to lose at least 5 pounds. Participants choose the course(s) they wish to attend for help in losing weight (e.g., Weight Watchers, general nutrition course, physical fitness course). After 6 months, each employee is weighed and awarded $5 per pound for weight loss between 5 and 50 pounds. They are re-weighed 6 months later and must pay back $10 for every pound gained. If they maintain the weight loss, they may keep the award. Money paid back to the company is donated to a local rehabilitation center.

Forty employees took part in the first "Lose Weight and Gain" program; after 6 months, a total of $3,000 had been awarded to 27 people who lost weight. At the end of the year, 7 employees had regained a total of 16 pounds and $160 was donated to the rehabilitation center.

Sherer Brothers Lumber Company

150 employees

At Sherer Brothers Lumber Company in Minneapolis, management is committed to creating a healthful lifestyle and attitude, both in the workplace and at home. This small business makes healthful nutrition choices available to workers and offers incentives to promote health.

Just because a company is small doesn't mean it can't provide health and nutrition programs. At Sherer Brothers Lumber Company, 100 employees perform physical labor and the remaining 50 are salespeople. The key to the health promotion program is its strong foundation in the management policy of creating and supporting healthy lifestyles and attitudes.

Sherer Brothers has made its "company culture" healthier. In the area of nutrition, Sherer Brothers has removed candy machines and added fruit dispensers. Caffeinated coffee has been replaced with decaffeinated. In addition, free healthful lunches and snacks are provided.

An incentive approach to promoting positive health habits is the "well-pay" article in the union contract. This rewards employees who are not absent or late, and who have no lost time due to injuries. Though this might have only an indirect effect on eating practices, its overall aim is to promote healthy employees and thus affect their nutrition, exercise, smoking, self-care, and health care behaviors.

Southern California Edison

17,000 employees
3,000 retirees

Participants in the "Why Weight?" program are eligible for reimbursement at 6 and 12-month periods.

In January 1985, Southern California Edison began the "Why Weight?" Program. This program uses behavior modification techniques rather than diet and uses the LEARN approach (*L*ifestyle, *E*xercise, *A*ttitude, *R*elationships, and *N*utrition). Each session of the 12-week course addresses these five elements so participants develop the skills needed for making wise food choices.

During the first session participants are weighed by a certified instructor. Working with the instructor, they determine a realistic weight-loss goal to be met by the end of 6 months. At 6 months, they weigh in at a medical facility of their choice, with a 3-pound allowance to account for scale variance. Weight-loss statements are verified by a medical professional.

Employees and retirees who achieve their contracted weight at 6 months are eligible for a 50% reimbursement of the enrollment fee. At 12 months, participants are to be weighed again. If they have maintained the weight loss, the additional 50% of the enrollment fee is reimbursed. Reimbursement procedures are also applied to dependents at a total of 50% reimbursement at 6 and 12-month weigh-ins when enrolled with the employee or retiree. Dependents enrolled alone are not eligible for reimbursement.

"Why Weight?" 6- and 12-month evaluations have shown that the program is highly successful in both weight loss and long-term maintenance.

Southern New England Telephone Company

14,000 employees

Southern New England Telephone Company believes that healthy employees are happy employees. Its Reach Out For Health Program uses gift certificates as

incentives in the weight control program to increase attainment of weight loss goals and to stimulate interest in other health courses.

Southern New England Telephone (SNET) Company's Reach Out for Health (ROFH) program began in 1983 because the company felt that money invested in health education programs would result in healthier, happier employees and lower health care costs. Approximately 20% of all employees have participated in at least one health program.

The nutrition programs included in ROFH are quite extensive and include Nutrition Month, weight control programs, general nutrition programs, nutrition assessment, nutrition counseling, food tasting sessions, and cafeteria programs such as nutrient analyses of the meals and lunchtime nutrition talks. Nutrition brochures, displays, movies, and articles in the company's newspaper are also available to employees. The programs, available to all employees and their family members, are offered at the workplace before and after work and during lunchtime. The cost of the programs is shared by the company and employees.

The weight control program uses gift certificates as incentives and has been quite successful. The course is taught by a registered dietitian and combines lecture, discussion, and behavior modification techniques to help participants successfully lose weight and maintain their weight loss. The average weight losses at the end of 2, 3, and 6 months have been 6.5, 10, and 14 pounds, respectively. A $10 gift certificate is awarded to participants who have achieved their weight-loss goal at the end of three months. Those achieving their weight-loss goal at 6 months also receive a $10 gift certificate. These gift certificates can be used to help detray the cost of other health courses offered in the Reach Out for Health program. Participants who attend the monthly maintenance meetings receive prizes such as nutrition posters and food and exercise slide rules. Programs are evaluated regularly using behavior change, knowledge increase, and attitude change questionnaires.

One unique activity that SNET offers to stimulate interest in the in-depth behavior modification programs is the "trigger session." These single-session programs are free of charge, may be initiated by interested employees, and address a wide variety of nutrition topics. From March 1984 to March 1985, 26 nutrition education trigger sessions were conducted with a total attendance of 754 employees, an average of 29 per session. Employees have rated these sessions as excellent, and continue asking for more.

Union Carbide Corporation

2,500 Employees (Danbury, Connecticut)

Health Plus programs use incentives that include partial rebate of course costs, discounts for other programs, and awards. Employees are regularly kept informed of all courses and services available through the Health Plus program newsletter.

Almost seven years ago the Health Plus program was developed at Union Carbide to prevent health problems and enhance the personal and professional quality of life of employees, their family members, and retirees. This comprehensive, multiphasic program uses a holistic approach to employee health education that includes a health assessment, personal action plans and goals, and a multi-faceted curriculum. Union Carbide reports that 40% of all employees have been reached through the nutrition assessment and counseling offered as part of Health Plus.

Employee incentives are used extensively in the weight control program and Lifestyle Education Series. "Not Another Diet," a weight-loss program, uses awards, rebates, and individual success as incentives. Participants who meet weight-loss and attendance goals receive a lifestyle certificate of achievement plus a 25% rebate on programs taken in the future. Employees are also eligible to be trained to lead programs. The average weight loss at the end of the program was 7.24 pounds, and at the one year follow-up, a 6.8-pound average weight loss was maintained.

The Lifestyle Education Series is designed as an independent study program for Health Plus members and nonmembers, and is ideally suited to meet the needs of busy individuals. It also is designed for employees who are not yet ready to participate in more extensive programs. A one-time payroll deduction of $5 is made for all employees participating in the series. The series consists of 15-minute health and lifestyle sessions that are action-oriented and hands-on in nature. Topics relate to the major areas of health most affected by lifestyle behaviors. Nutrition topics include cholesterol, triglycerides, weight management, sodium, and business travelers' nutrition. Participants completing 10 core and 4 elective topics within 6 months receive a Lifestyle Certificate of Achievement and a Health Plus T-shirt. Most important, graduates of the program learn that positive lifestyle changes can have a positive impact on their health.

Other nutrition activities and programs available to Carbiders include healthful vending machine snacks, recipe contests, Nutrition Week and Month, a literature rack, and publication of the Health Plus newsletter.

University of Minnesota Schools of Public Health and Medicine

675 employees

Monetary incentives are one approach to motivating people to meet weight-loss goals. This unique program at the University of Minnesota used payroll deductions that were refunded if people met the weight-loss goals they set for themselves. The average weight loss of 12.3 pounds over 6 months showed that this can be quite effective.

At the University of Minnesota Schools of Public Health and Medicine, a new approach was tried to create extra motivation for weight loss in a work setting. Announcements distributed in the campus mail invited 675 employees to join the program.

This program required participants to agree to a payroll incentive plan over a 6 month period. Forty-five employees chose a fixed amount of money, at least $5, that was to be deducted from their semimonthly paycheck. They also set their own weight-loss goals. At the time of weigh-in, they received their money back if they had met the weight-loss goal for that time period.

Participants were given a weight-loss manual and food records for monitoring eating behaviors and calorie intake at home. There was also an instructional program that was offered; it was not mandatory, but participants were encouraged to attend. Every 2 weeks, a group education session was held that related to the manual and food records, as well as nutrition, exercise, and ways of getting support for weight loss.

This program attracted people from the faculty, administrative and technical staff, and clerical personnel. 94% of those who signed up stayed in the program the entire 6 months, and 88% attended at least half of the weigh-ins. Participants lost an average of 12.3 pounds, and 44% reached their weight-loss goals. The money left in the incentive account at the end of the program was divided equally among those who reached their goals, providing an added incentive.

Employees who attended more of the weigh-ins were more successful in losing weight. Also, those who chose higher monetary incentives were better weight losers.

This type of program makes good sense in a small or medium-sized business because the incentive doesn't cost the employer anything—the employee chooses to be rewarded with a portion of his or her own paycheck. Also, this program continued over 6 months, which is longer than most worksite programs. Its success makes it an approach worth trying in other companies and organizations. (This program was reported in an article in *Preventive Medicine*, Volume 14, 1985, pp. 187-194.)

Resources

Because nutrition programs are a fairly recent addition to some worksite health promotion efforts, many employers need assistance in locating appropriate resources. The national nonprofit organizations and government agencies listed here can provide print and audiovisual materials for use in worksite settings. Many also provide instructional and program development assistance or can refer you to qualified providers in your area. Insurance companies, wellness councils, employer coalitions, universities, state and local health departments, local hospitals, health maintenance organizations, community health programs, and vendors of health promotion services can also provide valuable assistance. Many of these organizations employ dietitians and nutritionists who can be helpful in designing and conducting worksite nutrition programs.

American Cancer Society (ACS)

The American Cancer Society's "Taking Control" program provides information on factors that contribute to cancer risks, and suggests healthy lifestyle changes that may reduce the risk of developing cancer. It is a comprehensive package which enables businesses to address nutrition, weight control, smoking, alcohol, and other cancer-related factors. For companies interested in using the "Taking Control" program, ACS will provide training and speakers as needed, and materials at no cost once the program has been promoted in-house.

For further information on this program or other nutrition services provided by the American Cancer Society, please contact your local ACS chapter.

The American Dietetic Association (ADA)

The American Dietetic Association is the nation's largest professional organization for more than 52,000 dietitians, dietetic technicians, and nutritionists, with affiliates in all 50 states. Members have expertise in all areas of dietetic and nutrition practice, including counseling, nutrition education, health promotion and foodservice management. ADA has several special interest practice groups that have a worksite focus. These include Sports and Cardiovascular Nutritionists, Dietitians in Business and Industry, and Consulting Nutritionists in Private Practice.

ADA and its Foundation are establishing a National Center for Nutrition and Dietetics which will serve as a clearinghouse for materials, resources, and references. The Center will conduct training seminars and provides materials for employers and health professionals in areas such as diet and heart disease, hypertension, fitness, and obesity. The Association also has consumer education materials in these same areas, and sponsors National Nutrition Month each March.

For further information about ADA's services, contact a local or state chapter, or the national headquarters: Division of Practice, The American Dietetic Association, 430 North Michigan Avenue, Chicago, IL 60611.

American Heart Association (AHA)

The American Heart Association is a nonprofit, voluntary health organization dedicated to the reduction of premature death and disability from cardiovascular disease and stroke. The Association works toward this goal through programs in research, professional education, and public education. Brochures, audiovisuals, directories, position papers, guidelines, and fact sheets are available on diet and nutrition. The National Center of AHA has developed "Heart at Work," a comprehensive health promotion program specifically tailored for use by businesses. Nutrition is one of the five components included in this program. Any or all of the components can be used alone or integrated into existing worksite health promotion activities.

For further information about these and other AHA programs and services, contact your local AHA office.

American Red Cross

The American Red Cross is a private, nonprofit organization that offers health education programs in a variety of areas, including nutrition, hypertension control, first aid, and cardiopulmonary resuscitation (CPR). The Red Cross nutrition course, "Better Eating for Better Health," provides participants with a set of nutrition "survival skills" to help them apply current nutrition knowledge to their own lifestyles. This course is implemented by local chapters and can be offered through existing worksite health promotion programs. The course is taught for a fee by trained, certified Red Cross instructors.

For further information concerning the course, contact your local Red Cross chapter.

March of Dimes

The March of Dimes Birth Defects Foundation is a nonprofit, voluntary health organization dedicated to preventing birth defects and improving the outcome of pregnancy. Their "Good Health is Good Business" program is a preventive health education program for the workplace offered by local March of Dimes chapters at no cost. The program includes free educational seminars and a variety of audiovisual and print materials. The primary target audience is women in the childbearing years (16 to 44 years old), but a variety of employees will find the health message pertinent.

Topics for the "Good Health is Good Business" program are genetics; prenatal care; nutrition and exercise; smoking, alcohol, and drugs; environmental influences; teenage pregnancy; seminars for parents; and stress and pregnancy. The program is taught by volunteer health professionals working with local chapters. The program is flexible so the employer can choose which topics will be presented and the desired length of program sessions.

To find out more about this program, contact your local March of Dimes chapter, or write to the national office: Director, Business Health Programs, March of Dimes, 1275 Mamaroneck Avenue, White Plains, NY 10605.

National Dairy Council (NDC)

The National Dairy Council is a nonprofit education and scientific organization which focuses on nutrition research and nutrition education. There are 33 affiliated Dairy Council units with 127 offices across the country. NDC recently initiated the "Lifesteps: Weight Management" program to provide worksites with trained staff and materials to conduct a 13-week weight management course.

For further information, contact your local Dairy Council affiliate, or the National Dairy Council, 6300 N. River Road, Rosemont, IL 60018.

Society for Nutrition Education (SNE)

The Society for Nutrition Education, a nonprofit professional organization, communicates nutrition education research, concepts, and issues to employers, health professionals, and consumers for the purpose of improving the health of the public. In the spring of 1986, SNE published a special supplement to the *Journal of Nutrition Education* on "Nutrition at the Worksite." This special journal includes articles about worksite nutrition programs, reviews and listings of educational materials, and a directory of providers and programs. SNE provides films, bibliographies, and publications on health and nutrition; conducts training on worksite nutrition topics; and operates a Resource Lending Service for print and audiovisual materials (SNE Resource Lending Service, 321 Wallace Avenue, Vallejo, CA 94590).

For further information about available materials and services, contact: Society for Nutrition Education, 1736 Franklin Street, Suite 900, Oakland, CA 94612.

Government Agencies

U.S. Department of Agriculture

Cooperative Extension Service. The Cooperative Extension Service has 3,000 county offices throughout the United States. The Extension Service conducts informal education programs, and is a good source for low-cost print materials about nutrition education, the Dietary Guidelines, food preparation, and food safety. Extension home economists can conduct brown bag seminars on a variety of topics, and may also be able to help worksites design nutrition programs. Local agents also can refer callers to other sources of information.

Contact your county extension office or state land grant university for information about the Cooperative Extension agents in your area.

Food and Nutrition Information Center. The Food and Nutrition Information Center (FNIC) acquires books, journal articles, and audiovisual materials about human nutrition, nutrition education, foodservice management, and food tech-

nology. Worksite health promotion managers can obtain a variety of print and audiovisual materials for their programs at minimal cost through FNIC's lending and reference service.

For further information or a catalog of materials, contact: U.S. Department of Agriculture, Food and Nutrition Information Center, National Agricultural Library, Room 304, Beltsville, MD 20705.

U.S. Department of Health and Human Services (DHHS)

National Cancer Institute. The National Cancer Institute (NCI) conducts research and disseminates information on the diagnosis, treatment, and prevention of cancer. NCI has produced excellent pamphlets on cancer prevention, which can be used in business settings. Two such publications are "Good News: Better News: Best News" and "Diet, Nutrition, and Cancer Prevention: A Guide to Food Choices."

For further information, contact: Office of Cancer Communications, National Cancer Institute, Building 31, Room 10A-18, 9000 Rockville Pike, Bethesda, MD 20205.

ODPHP Health Information Center. The ODPHP Health Information Center (OHIC) (formerly the National Health Information Clearinghouse) is operated as a free service to the public by the Office of Disease Prevention and Health Promotion (ODPHP). It is a centralized source of information and provides referral for a broad range of health and nutrition questions, including those concerning worksite health promotion. The Center carries worksite-specific resource materials and a bibliography to aid in health promotion program development, as well as the *Dietary Guidelines for Americans*.

Contact: OHIC, 1255 23rd Street, N.W., Suite 275, Washington, D.C. 20037.

National Heart, Lung, and Blood Institute. The National Heart, Lung, and Blood Institute (NHLBI) conducts and supports research and education on diseases of the heart, lung, and blood. NHLBI is active in two categorical programs with nutrition and worksite components: the National Cholesterol Education Program and the National High Blood Pressure Education Program. The NHLBI Workplace Initiative supports research and education for reduction of cardiovascular risk factors. Nutrition efforts figure prominently in this initiative.

For further information, contact: Coordinator for Workplace Activities, Office of Prevention, Education, and Control, National Heart, Lung, and Blood Institute, Building 31, Room 4A18, Bethesda, MD 20892.

Suggested Reading

Much of the information included in this guide is based on articles from professional journals, government documents, and company reports. An extensive bibliography appears in: Glanz, K., and T. Seewald-Klein. Nutrition at the worksite: an overview. *Journal of Nutrition Education, 18*,2 (Supplement), S1–S12, 1986. Other important references include those listed below:

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Order Form

For additional copies of *Worksite Nutrition: A Decision Maker's Guide*, complete the order form below, including payment, and return to: The American Dietetic Association
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